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10/664,725	09/18/2003	Manabu Nakatani	01-1395	4358

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EXAMINER	
HELM, CARALYNNE E	

ART UNIT	PAPER NUMBER
1615	

NOTIFICATION DATE	DELIVERY MODE
01/18/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO.e-Office.rdg@boehringer-ingelheim.com

Office Action Summary	Application No.	Applicant(s)	
	10/664,725	NAKATANI ET AL.	
	Examiner	Art Unit	
	CARALYNNE HELM	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 6-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 6-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 6-12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ambuhl et al. (previously cited) in view of Hauel et al.

Ambuhl et al. teach a tablet composition with a poorly soluble drug, a water soluble diluent and polyoxamer (see paragraph 8; instant claim 10). Specifically, they teach that the drug is included along with a polymer, surfactant, and carrier where the surfactant is envisioned as poloxamer 188 (also known as polyoxamer), and the water-soluble diluent (called a carrier by Ambuhl et al.) is envisioned as mannitol (see

paragraphs 15, 44, 73-83, and 151; instant claims 6-8). Ambuhl et al. also teach that these preparations have drug at 15% to 40%, water soluble diluent at 10% to 40%, and surfactant from 10% to 70% of the composition (see paragraph 56, 88, and 128; instant claims 1 and14-15). A lubricant, such as magnesium stearate, is envisioned in the composition (see paragraphs 1121-122; instant claim 9). One method embodiment is performed by spraying a solution of the drug with surfactant onto a carrier that is then dried which is a process that is also know as fluid bed granulation (see paragraph 152; instant claim 14). In addition, Ambuhl et al. teach in another embodiment that the composition may be prepared by spray-drying a combination of the drug with surfactant in an aqueous solution (see paragraph 151 and 171-173; instant claim 15). The drug particulate from either method is then combined with an outer tablet matrix that is composed of a water soluble diluent that includes lactose (see paragraph 186; instant claim 15). This outer matrix material can comprise 10% to 60% of the composition and contains 75% lactose, yielding a composition with 7.5% to 45% lactose (see paragraphs 187 and 189; instant claims 14-15). Each of these preparation techniques requires the active agent to be dissolved in a solution; however the envisioned drugs are poorly soluble in water. Ambuhl et al. do not explicitly teach the presence of a basic agent in the composition or telmisartan as the poorly water soluble drug.

Hauel et al. teach a collection of benzamidazole compounds as active agents where telmisartan is explicitly envisioned (see first listed compound in claim 6). They go on to teach dosage forms for administration of the compounds and tablet formulations with 50 mg or 100 mg doses are included (see examples III-V; instant claims 10-12).

Hauel et al. teach a preference for the benzamidazole compounds, which like telmisartan have a carboxyl functional group (see page 113 lines 1-4). Telmisartan was known to be solubilized by strong base. Hauel et al. demonstrate this solubility in example II where a solution of their envisioned active is prepared by combination with meglumine (also known as methyl glucamine) and water where the active and meglumine are each present at 0.2 moles (1:1 molar ratio; see instant claims 1 and 14-15).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use telmisartan as the poorly soluble drug in the methods taught by Ambuhl et al. because it was a poorly water soluble drug known at the time of the invention and it was also envisioned in tablets utilizing many of the same components taught by Ambuhl et al. (e.g. The composition in example V taught by Hauel et al. falls within the set taught by Ambuhl et al.). Since the highlighted methods of making such a composition require the drug to be solubilized and Hauel et al. teach that their compounds can be solubilized by combination with meglumine, it would have been obvious to include meglumine at a 1:1 molar ratio in the spray drying or granulating solution taught by Ambuhl et al. to insure the drug's presence in dissolved form. This modification then yields the tablets of Ambuhl et al. with mannitol as water soluble diluent at 10% to 40% or lactose as water soluble diluent at 7.5% to 45%, poloxamer 188 as the surfactant at 10% to 70%, telmisartan at 15% to 40%, and the basic agent meglumine at a 1:1 molar ratio relative to the telmisartan (see instant claims 1 and 6-12) that are made by their spray drying or granulating methods (see instant claims 14-15).

While this modified reference does not describe the resulting tablet matrix as "dissolving", it has the same components instantly claimed as the constituents of a dissolving matrix which are water soluble components that are also capable of fast dissolution in physiological aqueous medium as required. Thus the tablet of Ambuhl et al. in view of Hauel et al. meets the limitations of a dissolving matrix. Therefore claims 1, 6-12, and 14-15 are obvious over Ambuhl et al. in view of Hauel et al.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ambuhl et al. in view of Hauel et al. as applied to claims 1, 6-12, and 14-15 above, and further in view of Gaviraghi (previously cited) and Ohkouchi (US PGPub No. 2004/0180085 - previously cited).

Ambuhl et al. in view of Hauel et al. make obvious the pharmaceutical composition of instant claim 1. In addition, Hauel et al. teaches the inclusion of additional active agents in with their compounds that include hydrochlorothiazide (HCTZ), a diuretic (see page 53 paragraph 2). Ambuhl et al. in view of Hauel et al. do not explicitly teach a bilayered configuration for the actives or a particular matrix for the HCTZ.

Gaviraghi teach a bilayered tablet configuration that includes telmisartan in one layer and another drug in the second layer (see page 13 lines 1-2). It is further taught that the telmisartan layer is formulated as taught in EP 0502314, which is also published as Hauel et al. (see page 11 lines 21-22).

Ohkouchi et al. teach disintegrating solid dosage forms (see abstract). In particular, HCTZ is an envisioned active for these compositions (see column 5 line 36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to follow the suggestion of Hauel et al. and include HCTZ in the telmisartan containing tablets of Ambuhl et al. in view of Hauel et al. because of their explicit directive to couple HCTZ with their benzamidazole compounds and to achieve the diuretic properties known to be beneficial in the hypertension treatment provided by telmisartan dosing. As a known arrangement for telmisartan and another active within a single dosage form, it would have been obvious to one of ordinary skill in the art at the time of the invention to configure the tablet of Ambuhl et al. in view of Hauel et al. as a bilayered tablet with telmisartan and HCTZ in the separate layers. This would also allow one of ordinary skill in the art to separately control the rate of release for each of the drugs. Given the teachings of Ohkouchi et al. regarding matrices known for the delivery of HCTZ, it also would have been obvious to utilize their matrix for the HCTZ layer in the bilayered tablet of Ambuhl et al. in view of Hauel et al. and Gaviraghi. Therefore claim 13 is obvious over Ambuhl et al. in view of Hauel et al., Gaviraghi, and Ohkouchi et al.

Response to Arguments

Applicant's arguments filed November 3, 2010 have been fully considered but they are moot in light of the new grounds of rejection. The amendment to the claims overcomes the rejections made under 35 USC 103(a) over Hauel et al. in view of

Berstein et al. and Doi et al. as well as Hauel et al. in view of Berstein et al., Doi et al., and Gaviraghi et al. therefore they are withdrawn.

Conclusion

No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARALYNNE HELM whose telephone number is (571)270-3506. The examiner can normally be reached on Monday through Friday 9-5 (EDT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on 571-272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Caralynne Helm/
Examiner, Art Unit 1615

/Juliet C Switzer/
Primary Examiner, Art Unit 1634